Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A fuel cell system comprising:

a fuel cell stack supplied with fuel gas and oxidant gas to generate an electric power which is supplied through a diode to a load installed on a fuel cell powered vehicle;

a secondary battery by which an electric power is charged and discharged;

an electric power converter connected to the fuel cell stack through the diode to convert an electric power level, charged in the secondary battery, and ~~supplying~~ supply a converted electric power to the load; and

a controller ~~operative to control~~ that includes a table of voltage-current characteristics of the fuel cell stack during start-up, and controls the electric power converter under two control modes during start-up of the fuel cell stack, the two control modes including: a first control mode ~~in which~~ to set a voltage level of ~~the~~ an electric power[[,]] to be supplied to the load from the secondary battery ~~to the load, lies~~ at a value equal to or greater than an open voltage level of the fuel cell stack; and a second control mode ~~in which an electric power level supplied to the load through the electric power converter is detected for permitting the~~ to perform reduction of an electric power level of the electric power to be supplied to the load from the secondary battery ~~at~~ to an electric power level less than a detected electric power level of an electric power supplied to the load through the electric power converter, and to interrupt the reduction of the electric power level when one of the following conditions is satisfied: (1) an output electric current of the fuel cell stack increases beyond a threshold in the table; and (2) an output voltage of the fuel cell stack drops below a threshold in the table.

2. (Cancelled).

3. (Cancelled).

4. (Currently Amended) The fuel cell system according to claim 1, wherein the controller ~~controls~~ is adapted to control the electric power converter ~~in a way to allow~~ such that under the first control mode ~~the~~ a temperature of the fuel cell stack~~, appearing when the voltage level of the electric power supplied from the secondary battery to the load is selected~~

~~to lie at a value equal to the open voltage level of the fuel cell stack or at a value greater than the open voltage level of the fuel cell stack, to be~~ is detected whereupon, if the detected temperature of the fuel cell stack is less than a given value, the electric power converter detects ~~the~~ an electric power level supplied to the load to allow the secondary battery to supply the electric power to the load at an electric power level less than resulting detected electric power level.

5. (Currently Amended) The fuel cell system according to claim 1, wherein the controller ~~controls~~ is adapted to control the electric power converter ~~in a way to allow~~ such that under the first control mode ~~the~~ a voltage level of the fuel cell stack~~, appearing when the voltage level of the electric power supplied from the secondary battery to the load is selected to lie at a value equal to the open voltage level of the fuel cell stack or at a value greater than the open voltage level of the fuel cell stack, to be~~ is detected whereupon a timing, at which the electric power level to be supplied to the load through the electric power converter is reduced, is controlled depending upon a rise-up condition of the detected voltage level of the fuel cell stack.

6. (Currently Amended) A fuel cell system comprising:

a fuel cell stack supplied with fuel gas and oxidant gas to generate an electric power which is supplied through a diode to a load installed on a fuel cell powered vehicle;

a secondary battery by which an electric power is charged and discharged;

electric power converting means connected to the fuel cell stack through the diode and converting an electric power level, charged in the secondary battery, to be supplied to the load; and

control means ~~operative to control~~ that has a table of voltage-current characteristic of the fuel cell stack during start-up, and controls the electric power converter means under two control modes during start up of the fuel cell stack, the two control modes including: a first control mode ~~where~~ to set a voltage level of ~~the~~ an electric power[[,]] to be supplied to the load from the secondary battery to the load, ~~lies~~ at a value equal to or greater than an open voltage level of the fuel cell stack ~~during start-up of the fuel cell stack~~; and a second control mode ~~where an electric power level supplied to the load through the electric power converter is detected for permitting the~~ to perform reduction of an electric power level of the electric power to be supplied to the load from the secondary battery ~~at~~ to an electric power level less

than a detected electric power level of an electric power supplied to the load through the electric power converting means, and to interrupt the reduction of the electric power level when one of the following conditions is satisfied: (1) an output electric current of the fuel cell stack increases beyond a threshold in the table; and (2) an output voltage of the fuel cell stack drops below a threshold in the table.

7. (Currently Amended) A method of controlling a fuel cell system, which has a fuel cell stack supplied with fuel gas and oxidant gas to generate an electric power which is supplied through a diode to a load installed on a fuel cell powered vehicle, and a secondary battery by which an electric power is charged and discharged, the method comprising:

converting a level of an electric power of the secondary battery to supply the electric power from the secondary battery to the load at a converted electric power level;

controlling the fuel cell system such that, when starting up the fuel cell stack, a voltage level of ~~the~~ an electric power to be supplied from the secondary battery to the load ~~lies~~ is set at a value equal to or greater than an open voltage level of the fuel cell stack; and

controlling the fuel cell system ~~such that the level of the electric power supplied to the load is detected to permit~~ to perform reduction of an electric power level of the electric power to be supplied to the load from the secondary battery ~~at~~ to an electric power level less than a detected electric power level supplied to the load, and

interrupting the reduction of the electric power level when one of the following conditions is satisfied: (1) an output electric current of the fuel cell stack increases beyond a threshold; and (2) an output voltage of the fuel cell stack drops below a threshold.

8. (Currently Amended) The fuel cell system according to claim 1, wherein the controller ~~controls~~ is adapted to control the fuel cell stack such that the fuel cell stack is kept in a stand-by state during the start-up of the fuel cell stack when ~~an output electric current of the fuel cell stack increases beyond a threshold electric current value~~ one of the conditions (1) and (2) is satisfied.

9. (Cancelled).

10. (Currently Amended) The fuel cell system according to claim 5, wherein the controller ~~controls~~ is adapted to control the electric power converter such that when the rise-up condition of ~~the~~ a detected power level of the fuel cell stack is slower than a predetermined

rise-up condition, then a timing at which electric power is taken out from the fuel cell stack is delayed from a pre-existing timing, in order to stabilize the fuel cell stack.